INDEX

ABSORPTION, renal, of amino acids, 491.
Acetate metabolism in isolated heart, 557.
Acetylcholine and atropinized denervated heart, 177.
—— and epinephrine, action of, on turtle ventricle, 147.
—— and muscle sensitivity, 608.
—— and potassium, muscle sensitivity to, 419.
—— production in antidromic vasodilatation, 478.
Acid-humoral stimulation of muscle, 1.
ADOLPH, E. F. The initiation of sweating in response to heat, 710.
Adrenal cortical hormone in burn shock, 203.
Adrenalectomy and alloxan diabetes, 538.
——, thyroid feeding and, effects of, on liver tissue, 693.
Adrenalin, influence of, on plasma prothrombin, 452.
Age, advancing, phosphorus compounds of muscle with, 77.
ALEXANDER, H. See ERICKSON, SIMONSON, TAYLOR, ALEXANDER and KEYS, 391.
Alpha-estradiol, effect of feeding yeast with, 465.
Altitude pain, rôle of exercise in, 279.
——, relation of CO, O_2 and hemoglobin at, 351.
—— tolerance and carboxyhemoglobin, 359.
Altitudes, critical, arterial oxyhemoglobin at, 427.
——, high, consciousness at, blood oxygen and, 685.
——, low, blood sugar in prolonged exposure to, 365.
Amino acids, renal reabsorption of, 491.
Ammonia and urea excretion, effect of caffeine on, 115.
Androgenic activities, renotrophic and, of steroids, 549.
Anoxia, factors in, 190.
Antigens, specific and non-specific, sensitivity of intestine to, 676.
ARCHIBALD, R. M. See PHILLIPS, DOLE, HAMILTON, EMERSON, ARCHIBALD and VAN SLYKE, 314.
Arsenic, manganese and copper in synthesis of hemoglobin, 500.
Arterial hypertension by chronic renal nerve stimulation, 38.
—— oxyhemoglobin at critical altitudes, 427.
Ascorbic acid, manganese and synthesis of, 566.
Atrophies, muscular, changes of protein during, 571.
Atropinized denervated heart, acetylcholine and, 177.
Avoidance and non-avoidance conditioning, 432.

BACH, L. M. N. The production of acetylcholine in antidromic vasodilatation, 478.
—— The reflex activation of the vasodilator fibers of the dorsal roots and their rôle in vasodilator tone, 474.
BARCROFT, J. See LORBER, LIFSON, WOOD and BARCROFT, 557.
Barometric pressure, low, vitamins and resistance to, 130.
BARONOFSKY, I. D. See QUICK, OTA and BARONOFSKY, 273.
BEHRMANN, V. G., V. SCHELLING and F. W. HARTMAN. Blood histamine levels in experimental burns, 483.
Benzene poisoning, protein-deficient diet and, 166.
—— toxicity and protein and fat content of diet, 158.
BERNHEIM, F. and M. L. C. BERNHEIM. Note on the effect of caffeine on ammonia and urea excretion in rabbits, 115.
BERNHEIM, M. L. C. See BERNHEIM and BERNHEIM, 115.
BERRYMAN, G. H., C. R. HENDERSON, C. E. FRENCH, J. T. GOORLEY, H. A. HARPER, H. POLLACK and D. M. HARKNESS. Some factors influencing the biochemical appraisal of group nutritional status, 625.
BEYER, K. H. See WRIGHT, BEYER, SKEGGS, RUSSO and PATCH, 633.
Bile changes, spontaneous, from chronic fistula, 186.
——, pancreatic juice and, cobalt elimination in, 285.

Biochemical appraisal of group nutritional status, 625.
Bischoff, F. The influence of sodium lauryl sulfate on the biologic response to the gonadotropins and to insulin, 123.
Blair, H. A. and A. M. Wedd. The action of cardiac ejection on venous return, 528.
——. See Wedd and Blair, 147.
Blood changes from dehydration, 154.
—— blood flow in hands, temperature factors influencing, 218.
—— ——, renal ischemia, clearances and, 376.
—— ——, skin, by plethysmograph, 716.
—— histamine levels in burns, 483.
—— oxygen and consciousness at high altitudes, 685.
—— plasma prothrombin, influence of adrenalin on, 452.
—— pressure, effect of intracisternal injection of potassium phosphate on, 223.
—— regeneration in vitamin deficiency, 54.
—— sugar and work performance, effect of meals on, 432.
—— —— in prolonged exposure to low altitudes, 365.
——, venous return in absence of cardiac drive, 441.
Blood. *See* Arterial.
Blood. *See* Prothrombin.
Bone marrow and leucocyte respiration, effects of thiouracil on, 71.
Boyd, E. M., T. J. Earl, S. Jackson, B. Palmer and M. Stevens. Alterations in the properties of dog hepatic bile with increasing age of the chronic biliary fistula, 186.
Brain, release of phosphate by, on stimulation, 542.
Brannon, E. S. See Warren, Stead and Brannon, 458.
Britton, S. W. and R. F. Kline. Age, sex, carbohydrate, adrenal cortex and other factors in anoxia, 193.
Brown, E. B., Jr. See Hoffman, Clark and Brown, 685.
Bulger, H. A. See Holden and Bulger, 638.
Bunde, C. A. See Lackey, Bunde and Harris, 470.
Burdick, H. O. Further observations on induced ovulation in the mouse as a rapid test for pregnancy, 387.
Burns, blood histamine levels in, 483.
Byer, F. T. See Eaton, Ferguson and Byer, 491.

Caffeine, effect of, on ammonia and urea excretion, 115.
Calcium concentration and prothrombin time, 67.
Campbell, D. H. See Feigen and Campbell, 676.
Carbohydrate intake, blood sugar and, at low altitudes, 365.
Carbon monoxide, oxygen and hemoglobin at altitude, relation of, 351.
—— ——, uptake of, oxygen pressure and, 346.
Carboxyhemoglobin, altitude tolerance and, 359.
Cardiac drive, venous return in absence of, 441.
—— ejection, action of, on venous return, 528.
—— failure in hyperthyroidism, effects of yeast on, 16.
—— glycogen deposition, relation of, to ketosis, 470.
—— injury potential, 507.
—— output by right heart catheterization, 458.
Cardiac. *See* Heart.
Chaikoff, I. L. See Sheline, Chaikoff and Montgomery, 285.
Charipper, H. A., E. D. Goldsmith and A. S. Gordon. Vitamin deficiency and overdosage and the resistance of rats to lowered barometric pressures, 130.
Chen, K. K. See Wakim, Fink and Chen, 452.
Cholesterol feeding, protein deficiency and, liver in, 646.
Cholesterolemia, hyper-, experimental lipemia and, 660.
Cicardo, V. H. Release of phosphate by the brain upon stimulation, 542.
Clark, R. T., Jr. See Hoffman, Clark and Brown, 685.
CO, elimination of, and its possible conversion to CO_2, 253.
——, fate of, in recovery from CO poisoning, 239.
—— poisoning, fate of CO in recovery from, 239.
CO_2, conversion of CO to, in body, 253.

Cobalt elimination in pancreatic juice and bile, 285.
Collings, W. D. See Ralston, Collings, Taylor and Ogden, 441.
Conditioning, avoidance and non-avoidance, 432.
Copper, arsenic, manganese and, in synthesis of hemoglobin, 500.
Corn syrups, nutritive value of dextrose and of, 107.

D'Angelo, S. A. Blood sugar levels and carbohydrate administration in human subjects during prolonged exposures to moderately low altitudes, 365.
Darrow, D. C. and F. L. Engel. Liver water and electrolytes in hemorrhagic shock, 32.
Dawson, H. See Janes, Dawson and Myers, 538.
DeBoer, B. Changes in the blood during chronic and acute dehydration, 154.
Dehydration and blood changes, 154.
Denervated heart, atropinized, acetylcholine and, 177.
—— muscle, effect of electrical stimulation on, 447.
—— ——, partially, recovery of, 587.
Denervation, nerve and muscle changes after, 48.
Deuel, H. J., Jr. See Ershoff and Deuel, 465.
Dextrose, nutritive value of, and of corn syrups, 107.
Diabetes, alloxan, adrenalectomy and, 538.
Diet, protein and fat content of, benzene toxicity and, 158.
——, protein-deficient, and benzene poisoning, 166.
Diethylstilbestrol, effect of, after thyroidectomy, 411.
Dole, V. P., K. Emerson, Jr., R. A. Phillips, P. Hamilton and D. D. Van Slyke. The renal extraction of oxygen in experimental shock, 337.
——. See Phillips, Dole, Hamilton, Emerson, Archibald and Van Slyke, 314.
Dunlop, A. P. See Jaques and Dunlop, 67.

Earl, T. J. See Boyd, Earl, Jackson, Palmer and Stevens, 186.
Eaton, A. G., F. P. Ferguson and F. T Byer. The renal reabsorption of amino acids in dogs: valine, leucine and isoleucine, 491.
Edds, M. V., Jr. See Weiss and Edds, 587.
Elbel, E. R. and E. L. Green. Pulse reaction to performing step-up exercise on benches of different heights, 521.
Electrolytes, liver water and, in hemorrhagic shock, 32.
Elvehjem, C. A. See Ruegamer, Michaud, Elvehjem and Hart, 23.
Emerson, K., Jr. See Dole, Emerson, Phillips, Hamilton and Van Slyke, 337.
—— See Phillips, Dole, Hamilton, Emerson, Archibald and Van Slyke, 314.
Endicott, K. M. See Kornberg and Endicott, 291.
Endocardial extrasystoles, epicardial and, 615.
Endocrines and respiratory enzymes, 693.
Energy cost of horizontal and grade walking, 391.
—— transformations during shock, 93.
Engel, F. L. See Darrow and Engel, 32.
Epicardial and endocardial extrasystoles, 615.
Epinephrine, acetylcholine and, action of, on turtle ventricle, 147.
Erickson, L., E. Simonson, H. L. Taylor, H. Alexander and A. Keys. The energy cost of horizontal and grade walking on the motor-driven treadmill, 391.
Ershoff, B. H. and H. J. Deuel, Jr. The beneficial effects of yeast on the body and gonadal weight of immature rats fed alpha-estradiol, 465.
—— and D. Hershberg. The beneficial effects of yeast on the cardiac failure of hyperthyroid rats, 16.
Exercise, energy cost of, 391.
——, pulse reaction to, 521.
——, rôle of, in altitude pain, 279.
Eye, provisual red and visual red, 561.
——, visual thresholds during insulin hypoglycemia, 299.
Eyster, J. A. E. and W. E. Gilson. The development and contour of cardiac injury potential, 507.

FAT content of diet, protein and, benzene toxicity and, 158.
——, exogenous, in fatty infiltration of liver, 667.
Feigen, G. A. and D. H. Campbell. The relative sensitivity of the mucosal and peritoneal surfaces of guinea-pig ileum to histamine, acetylcholine and specific antigens, 676.
Ferguson, F. P. See Eaton, Ferguson and Byer, 491.
Finerty, J. C. and R. Gesell. The effect of cH on humoral stimulation of striated muscle and its application to the chemical control of breathing, 1.
Fink, R. D. See Wakim, Fink and Chen, 452.
Fischer, E. and V. W. Ramsey. Changes in protein content and in some physicochemical properties of the protein during muscular atrophies of various types, 571.
——. The effect of daily electrical stimulation of normal and denervated muscles upon their protein content and upon some of the physicochemical properties of the protein, 583.
Fistula, chronic biliary, spontaneous changes in bile from, 186.
Food, effect of, on blood sugar and work performance, 402.
Franke, R. E. See Lilienthal, Riley, Proemmel and Franke, 351.
Freeman, S. See Li and Freeman, 158, 646, 660, 667.
——. See Li, Freeman, Hough and Gunn, 166.
French, C. E. See Berryman, Henderson, French, Goorley, Harper, Pollack and Harkness, 625.
Fugitt, C. H. See Lilienthal and Fugitt, 359.

GESELL, R. See Finerty and Gesell, I.
Gilson, A. S., Jr. See Walker, Smolik and Gilson, 223.
Gilson, W. E. See Eyster and Gilson, 507.
Glycogen deposition, cardiac, relation of, to ketosis, 470.
Goldman, A. See McShan, Potter, Goldman, Shipley and Meyer, 93.
Goldsmith, E. D. See Charipper, Goldsmith and Gordon, 130.
Gonadotrophic, anti-, serum, mechanism of inhibitory action of, 181.
Gonadotropin, activity of, in combination with zinc, 28.
Gonadotropins and insulin, absorption of, effect of sodium lauryl sulfate on, 123.
Goorley, J. T. See Berryman, Henderson, French, Goorley, Harper, Pollack and Harkness, 625.
Gordon, A. S. See Charipper, Goldsmith and Gordon, 130.
Green, E. L. See Elbel and Green, 521.
Gregersen, M. I. See Tobias, Lawrence, Roughton, Root and Gregersen, 253.
Growth and hemoglobin production on purified rations, 23.
—— response, renal, to thyroidectomy, 681.
Gunn, F. D. See Li, Freeman, Hough and Gunn, 166.

HALDI, J. and W. Wynn. The effect of low and high carbohydrate meals on the blood sugar level and on work performance in strenuous exercise of short duration, 402.
Halperin, M. H. See McFarland, Halperin and Niven, 299.
Hamilton, P. B. See Dole, Emerson, Phillips, Hamilton and Van Slyke, 337.
——. See Phillips, Dole, Hamilton, Emerson, Archibald and Van Slyke, 314.
Haney, H. F. and A. J. Lindgren. The effect of acetylcholine on the atropinized denervated heart, 177.
Harkness, D. M. See Berryman, Henderson, French, Goorley, Harper, Pollack and Harkness, 625.
Harper, H. A. See Berryman, Henderson, French, Goorley, Harper, Pollack and Harkness, 625.
Harris, L. C. See Lackey, Bunde and Harris, 470.
Hart, E. B. See Ruegamer, Michaud, Elvehjem and Hart, 23.
Hart, E. R. See Munro, Hart, Munro and Walkling, 206.
Hartman, F. W. See Behrmann, Schelling and Hartman, 483.
Heart, atropinized denervated, acetylcholine and, 177.
—— catheterization, right, cardiac output by, 458.

Heart, effect of intracisternal injection of potassium phosphate on, 223.
——, — epicardial and endocardial extrasystoles, 615.
——, isolated, acetate metabolism in, 557.
—— response to exercise, 521.
Heart. *See* Cardiac.
Heart. *See* Ventricle.
Heat, initiation of sweating in response to, 710.
Hemoglobin, As, Mn and Cu in synthesis of, 500.
——, carbon monoxide, oxygen and, at altitude, 351.
——, carboxy-, and altitude tolerance, 359.
—— production, growth and, on purified rations, 23.
Hemorrhagic shock, liver water and electrolytes in, 32.
——————, renal blood flow and clearance in, 699.
Henderson, C. R. See Berryman, Henderson, French, Goorley, Harper, Pollack and Harkness, 625.
Henry, F. M. The rôle of exercise in altitude pain, 279.
Hepatectomy, prothrombin A and B following, 206.
Hershberg, D. See Ershoff and Hershberg, 16.
Hertzman, A. B., W. C. Randall and K. E. Jochim. The estimation of the cutaneous blood flow with the photoelectric plethysmograph, 716.
Hines, H. M., W. H. Wehrmacher and J. D. Thomson. Functional changes in nerve and muscle after partial denervation, 48.
Histamine levels, blood, in burns, 483.
Hoff, H. E. See Nahum and Hoff, 615.
Hoffman, C. E., R. T. Clark, Jr. and E. B. Brown, Jr. Blood oxygen saturations and duration of consciousness in anoxia at high altitudes, 685.
Holden, R. F., Jr. and H. A. Bulger. The nature of volume effects in renal clearances, 638.
Hormone, adrenal cortical, in burn shock, 203.
——, anti-, inhibition, mechanism of, 181.
Hormones, steroid, and phosphatases of kidney, 118.
Horvath, S. M. The distribution of phosphorus compounds in the gastrocnemius muscle as influenced by the ageing process, 77.
Hough, V. H. See Li, Freeman, Hough and Gunn, 166.
Humoral, acid-, stimulation of muscle, 1.
Hypertension, arterial, by chronic renal nerve stimulation, 38.
Hyperthyroidism, effects of yeast on cardiac failure in, 16.
Hypoglycemia, insulin, visual thresholds during, 299.

Ingle, D. J. and M. H. Kuizenga. The survival of non-adrenalectomized rats in burn shock with and without adrenal cortical hormone treatment, 203.
Inhibition, antihormone, mechanism of, 181.
Insulin, destruction of, by sodium lauryl sulfate, 123.
—— hypoglycemia, visual thresholds during, 299.
Intestine, sensitivity of, to histamine, acetylcholine and antigens, 676.
Ischemia, renal, clearances and blood flow, 376.
Ivy, A. C. See Kosman, Osborne and Ivy, 447.

Jackson, S. See Boyd, Earl, Jackson, Palmer and Stevens, 186.
Janes, R. G. The effect of diethylstilbestrol on thyroidectomized rats, 411.
——, H. Dawson and L. Myers. Further observations concerning effect of adrenalectomy on alloxan diabetes: paired feeding experiments, 538.
Jaques, L. B. and A. P. Dunlop. The effect of calcium concentration on prothrombin time, 67.
Jochim, K. E. See Hertzman, Randall and Jochim, 716.

Katz, L. N. See Meyer, Lendrum and Katz, 151.
Ketosis, relation of cardiac glycogen deposition to, 470.
Keys, A. See Erickson, Simonson, Taylor, Alexander and Keys, 391.
Kidney, phosphatases of, steroid hormones and, 118.
Kidney. *See* Renal.

Kleitman, N. See Whatmore, Morgan and Kleitman, 432.
Kline, R. F. See Britton and Kline, 190.
Kochakian, C. D. The effect of dose and nutritive state on the renotrophic and androgenic activities of various steroids, 549.
——. The effect of various steriod hormones on the "alkaline" and "acid" phosphatases of the kidney of the mouse, 118.
Kornberg, A. and K. M. Endicott. Potassium deficiency in the rat, 291.
——, H. Tabor and W. H. Sebrell. Blood regeneration in rats deficient in biotin, thiamin or riboflavin, 54.
Kosman, A. J., S. L. Osborne and A. C Ivy. The effect of electrical stimulation upon the course of atrophy and recovery of the gastrocnemius of the rat, 447.
Kottke, F. J., W. G. Kubicek and M. B. Visscher. The production of arterial hypertension by chronic renal artery-nerve stimulation, 38.
Krause, A. C. Provisual red and visual red, 561.
Kubicek, W. G. See Kottke, Kubicek and Visscher, 38.
Kuizenga, M. H. See Ingle and Kuizenga, 273.
Kupperman, H. S. and R. K. Meyer. Considerations of the mechanism of neutralization of endogenous gonadotrophic hormone of the rat by antigonadotrophic serum, 181.

Lackey, R. W., C. A. Bunde and L. C. Harris. The relationship of cardiac glycogen deposition to blood ketone levels in experimental ketosis, 470.
Lawrence, J. H. See Tobias, Lawrence, Roughton, Root and Gregersen, 253.
Leath, M. J. See Tipton, Leath, Tipton and Nixon, 693.
Leathem, J. H. Gonadotropic activity of equine gonadotropin in combination with zinc, 28.
Lendrum, B. See Meyer, Lendrum and Katz, 151.
Leucocyte respiration, effects of thiouracil on bone marrow and, 71.
Li, T-W., and S. Freeman. Effect of protein deficiency and cholesterol feeding on the liver of dogs, 646.
—— —— ——. Experimental lipemia and hypercholesterolemia by protein depletion and by cholesterol feeding in dogs, 660.
—— —— ——. The effect of protein and fat content of the diet upon the toxicity of benzene for rats, 158.
—— —— ——. The importance of exogenous fat in fatty infiltration of the liver of dogs, 667.
——, ——, V. H. Hough and F. D. Gunn. The increased susceptibility of protein-deficient dogs to benzene poisoning, 166.
Lifson, N. See Lorber, Lifson, Wood and Barcroft, 557.
Lilienthal, J. L., Jr. and C. Hs Fugitt. The effect of low concentrations of carboxyhemoglobin on the "altitude tolerance" of man, 359.
—— and M. B. Pine. The effect of oxygen pressure on the uptake of carbon monoxide by man at sea level and at altitude, 346.
——, R. L. Riley and D. D. Proemmel. Arterial oxyhemoglobin saturations at critical pressure-altitudes breathing various mixtures of oxygen and nitrogen with a note on the effect of exercise, 427.
——, ——, —— and R. E. Franke. The relationships between carbon monoxide, oxygen and hemoglobin in the blood of man at altitude, 351.
Lindgren, A. J. See Haney and Lindgren, 177.
Lipemia, experimental, and hypercholesterolemia, 660.
Liver, exogneous fat in fatty infiltration of, 667.
—— in protein deficiency and cholesterol feeding, 646.
—— tissue, effects of feeding thyroid and of adrenalectomy on, 693.
—— water and electrolytes in hemorrhagic shock, 32.
Lorber, V., N. Lifson, H. G. Wood and J. Barcroft. The metabolism of acetate by the completely isolated mammalian heart investigated with carboxyl labeled acetate, 557.

McFarland, R. A., M. H. Halperin and J. Niven. Visual thresholds as an index of physiological imbalance during insulin hypoglycemia, 299.

McHargue, J. S. See Skinner and McHargue, 500, 566.
McShan, W. H., V. R. Potter, A. Goldman, E. G. Shipley and R. K. Meyer. Biological energy transformations during shock as shown by blood chemistry, 93.

Manganese and copper, arsenic, in synthesisof hemoglobin, 500.
—— and synthesis of ascorbic acid, 566.
Metabolism, acetate, in isolated heart, 557.
Meyer, J., B. Lendrum and L. N. Katz. The effect of sodium and chloride salts in preventing the shocklike state following venous occlusion of a limb in the dog, 151.
Meyer, R. K. See Kupperman and Meyer 181.
——. See McShan, Potter, Goldman, Shipley and Meyer, 93.
Michaud, L. See Ruegamer, Michaud, Elvehjem and Hart, 23.
Montgomery, M. L. See Sheline, Chaikoff and Montgomery, 285.
Morgan, E. A. See Whatmore, Morgan and Kleitman, 432.
Munro, F. L., E. R. Hart, M. P. Munro and A. A. Walkling. The changes in components A and B of prothrombin in the dog following hepatectomy, 206.
—— and J. E. Thomas. The number and relative concentrations of protein constituents of canine pancreatic juice as determined by electrophoresis, 140.
——. See Munro, Hart, Munro and Walkling, 206.
Muscle, acid-humoral stimulation of, 1.
—— changes, nerve and, after denervation, 48.
——, denervated, effect of electrical stimulation on, 447.
——, ——, electrical stimulation and protein of, 583.
——, partially denervated, recovery of, 587.
——, phosphorus compounds of, with advancing age, 77.
——, pyloric, under high oxygen pressure, 211.
—— sensitivity, 608.
—— —— to acetylcholine and potassium, 419.
Muscular atrophies, changes of protein during, 571.
Mustelus, respiratory flow in, 134.
Myers, L. See Janes, Dawson and Myers, 538.

Nahum, L. H. and H. E. Hoff. The configuration of epicardial and endocardial extrasystoles in the chest leads, 615.
Nerve and muscle changes after denervation, 48.
——, reflex activation of vasodilators in dorsal roots, 474.
Nerve. *See* Denervated.
Nerves, —proprioceptors in shivering, 264.
Niven, J. I. See McFarland, Halperin and Niven, 299.
Nixon, W. L. See Tipton, Leath, Tipton and Nixon, 693.
Nutritional status, group, biochemical appraisal of, 625.
Nutritive value of dextrose and of corn syrups, 107.

Ogden, E. Respiratory flow in Mustelus, 134.
——. See Ralston, Collings, Taylor and Ogden, 441.
Osborne, S. L. See Kosman, Osborne and Ivy, 447.
Ota, R. K. See Quick, Ota and Baronofsky, 273.
Ovulation, induced, in mouse, as test for pregnancy, 387.
Oxygen and hemoglobin, carbon monoxide, relation of, at altitude, 351.
——, blood, and consciousness at high altitudes, 685.
—— pressure and uptake of carbon monoxide, 346.
—— ——, high, pyloric muscle under, 211.
——, renal extraction of, in shock, 337.
Oxyhemoglobin, arterial, at critical altitudes, 427.

Pain, altitude, rôle of exercise in, 279.
Palmer, B. See Boyd, Earl, Jackson, Palmer and Stevens, 186.
Pancreatic juice and bile, cobalt elimination in, 285.
——, protein constituents of, 140.
Pantothenic acid, renal clearance of, 633.
Patch, E. A. See Wright, Beyer, Skeggs, Russo and Patch, 633.
Perkins, J. F., Jr. The rôle of the proprioceptors in shivering, 264.

Phillips, R. A., V. P. Dole, P. B. Hamilton, K. Emerson, Jr., R. M. Archibald and D. D. Van Slyke. Effects of acute hemorrhagic and traumatic shock on renal function of dogs, 314.
——. See Dole, Emerson, Phillips, Hamilton and Van Slyke, 337.
Phosphatases of kidney, steroid hormones and, 118.
Phosphate, release of, by brain on stimulation, 542.
Phosphorus compounds of muscle with advancing age, 77.
Pine, M. B. See Lilienthal and Pine, 346
Plasma prothrombin, influence of adrenalin on, 452.
Pollack, H. See Berryman, Henderson, French, Goorley, Harper, Pollack and Harkness, 625.
Potassium, acetylcholine and, muscle sensitivity to, 419.
—— and muscle sensitivity, 608.
—— deficiency in rat, 291.
—— phosphate, effects of intracisternal, 223.
Potter, V. R. See McShan, Potter, Goldman, Shipley and Meyer, 93.
Pregnancy, induced ovulation in mouse as test for, 387.
Proemmel, D. D. See Lilienthal, Riley and Proemmel, 427.
——. See Lilienthal, Riley, Proemmel and Franke, 351.
Proprioceptors in shivering, 264.
Protein and fat content of diet, benzene toxicity and, 158.
——, changes of, during muscular atrophies, 571.
—— constituents of pancreatic juice, 140.
—— deficiency and cholesterol feeding, liver in, 646.
—— deficient diet and benzene poisoning, 166.
—— of denervated muscle, electrical stimulation and, 583.
Prothrombin A and B following hepatectomy, 206.
—— time, calcium concentration and, 67.
Prothrombin. *See* Blood.
Pulse reaction to step-up exercise, 521.
Pyloric muscle under high oxygen pressure, 211.

Quick, A. J., R. K. Ota and I. D. Baronofsky. On the thrombopenia of anaphylactic and peptone shock, 273.

Ralston, H. J., W. D. Collings, A. N. Taylor and E. Ogden. Venous return in the absence of cardiac drive, 441.
Ramsey, V. W. See Fischer and Ramsey, 571, 583.
Randall, W. C. See Hertzman, Randall and Jochim, 716.
Rations, purified, growth and hemoglobin production on, 23.
Reflex activation of vasodilators in dorsal roots, 474.
Renal blood flow and clearance in hemorrhagic shock, 699.
—— clearance in hemorrhagic shock, 699.
—— —— of pantothenic acid, 633.
—— clearances, volume effects in, 638.
—— extraction of oxygen in shock, 337.
—— function, effects of shock on, 314.
—— growth response to thyroidectomy, 681.
—— ischemia, clearances and blood flow, 376.
—— nerve stimulation, chronic, arterial hypertension by, 38.
—— reabsorption of amino acids, 491.
Renal. *See* Kidney.
Renotrophic and androgenic activities of steroids, 549.
Respiration, bone marrow and leucocyte, effect of thiouracil on, 71.
——, effect of cH on, 1.
——, effect of intracisternal injection of potassium phosphate on, 223.
Respiratory flow in Mustelus, 134.
Richter, C. P. A comparison of the nutritive values of dextrose and of corn syrups and of the effects produced on their utilization by thiamine, 107.
Riggs, B. C. The effect of exposure to oxygen at high pressure upon the tonus and respiration of pyloric muscle from the rabbit, 211.
Riley, R. L. See Lilienthal, Riley and Proemmel, 427.
——. See Lilienthal, Riley, Proemmel and Franke, 351.
Root, W. S. See Roughton and Root, 239.
——. See Tobias, Lawrence, Roughton, Root and Gregersen, 253.

ROUGHTON, F. J. W. See TOBIAS, LAWRENCE, ROUGHTON, ROOT and GREGERSEN, 253.
—— and W. S. ROOT. The fate of CO in the body during recovery from mild carbon monoxide poisoning in man, 239.
RUEGAMER, W. R., L. MICHAUD, C. A. ELVEHJEM and E. B. HART. Growth and hemoglobin production in dogs on purified rations, 23.
RUSSO, H. F. See WRIGHT, BEYER, SKEGGS, RUSSO and PATCH, 633.

SALINE in shock after venous occlusion of limb, 151.
SCHELLING, V. See BEHRMANN, SCHELLING and HARTMAN, 483.
SEBRELL, W. H. See KORNBERG, TABOR and SEBRELL, 54.
SELKURT, E. E. Comparison of renal clearances with direct renal blood flow under control conditions and following renal ischemia, 376.
——. Renal blood flow and renal clearance during hemorrhagic shock, 699.
Sensitivity of mucosal and peritoneal surfaces, 676.
SHELINE, G. E., I. L. CHAIKOFF and M. L. MONTGOMERY. The elimination of administered cobalt in pancreatic juice and bile of the dog, as measured with its radioactive isotopes, 285.
SHIPLEY, E. G. See McSHAN, POTTER, GOLDMAN, SHIPLEY and MEYER, 93.
Shivering, rôle of proprioceptors in, 264.
Shock after venous occlusion of limb, use of saline in, 151.
——, anaphylactic and peptone, thrombopenia of, 273.
——, burn, adrenal cortical hormone in, 203.
——, effects of, on renal function, 314.
——, energy transformations during, 93.
——, hemorrhagic, liver water and electrolytes in, 32.
——, ——, renal blood flow and clearance in, 699.
——, renal extraction of oxygen in, 337.
SIMONSON, E. See ERICKSON, SIMONSON, TAYLOR, ALEXANDER and KEYS, 391.
SKEGGS, H. R. See WRIGHT, BEYER, SKEGGS, RUSSO and PATCH, 633.
Skin volume pulse and blood flow, 716.
——, water losses through, 436.
SKINNER, J. T. and J. S. McHARGUE. Experiments to ascertain the effect of manganese on the synthesis of ascorbic acid in the guinea pig, 566.
——— ———. Supplementary effects of arsenic and manganese on copper in the synthesis of hemoglobin, 500.
SMOLIK, E. A. See WALKER, SMOLIK and GILSON, 223.
SPEALMAN, C. R. Effect of ambient air temperature and of hand temperature on blood flow in hands, 218.
STEAD, E. A., JR. See WARREN, STEAD and BRANNON, 458.
STEVENS, M. See BOYD, EARL, JACKSON, PALMER and STEVENS, 186.
Steroid hormones and phosphatases of kidney, 118.
Steroids, renotrophic and androgenic activities of, 549.
Stimulation, electrical, and protein of denervated muscle, 583.
——, ——, effect of, on denervated muscle, 447.
——, release of phosphate by brain on, 542.
Stomach. *See* Muscle.
Sweating, initiation of, in response to heat, 710.
Systoles, extra-, epicardial and endocardial, 615.

TABOR, H. See KORNBERG, TABOR and SEBRELL, 54.
TAYLOR, A. N. See RALSTON, COLLINGS, TAYLOR and OGDEN, 441.
TAYLOR, H. L. See ERICKSON, SIMONSON, TAYLOR, ALEXANDER and KEYS, 391.
Temperature factors influencing blood flow in hands, 218.
TENNENT, D. M. A study of the water losses through the skin in the rat, 436.
Thiamine in nutritive values of dextrose and corn syrups, 107.
Thiouracil, effect of, on bone marrow and leucocyte respiration, 71.
THOMAS, J. E. See MUNRO and THOMAS, 140.
THOMSON, J. D. See HINES, WEHRMACHER and THOMSON, 48.
Thrombopenia of anaphylactic and peptone shock, 273.
Thyroid feeding and adrenalectomy, effects of, on liver tissue, 693.
Thyroidectomy, effect of diethylstilbestrol after, 411.
——, renal growth response to, 681.

Tipton, I. H. See Tipton, Leath, Tipton and Nixon, 693.

Tipton, S. R., M. J. Leath, I. H. Tipton and W. L. Nixon. The effects of feeding thyroid substance and of adrenalectomy on the activities of succinoxidase and cytochrome oxidase in the liver tissue of rats, 693.

Tobias, C. A., J. H. Lawrence, F. J. W. Roughton, W. S. Root and M. I. Gregersen. The elimination of carbon monoxide from the human body with reference to the possible conversion of CO to CO_2, 253.

Torda, C. and H. G. Wolff. Effect of compounds related to glycolysis in muscle on the sensitivity of muscle to acetylcholine and potassium, 419.

———. Effect of some isocyclic, aromatic and heterocyclic compounds on muscle senstivity to acetylcholine and potassium, 608.

Toxicity of benzene, effect of protein and fat content of diet on, 158.

Urea excretion, ammonia and, effect of caffeine on, 115.

Van Slyke, D. D. See Dole, Emerson, Phillips, Hamilton and Van Slyke, 337.

——. See Phillips, Dole, Hamilton, Emerson, Archiblad and Van Slyke, 314.

Vasodilatation, antidromic, acetylcholine production in, 478.

Vasodilators, reflex activation of, 474.

Venous occlusion of limb, use of saline in shock after, 151.

—— return, action of cardiac ejection on, 528.

—— —— in absence of cardiac drive, 441.

Ventricle. *See* Heart.

Visscher, M. B. See Kottke, Kubicek and Visscher, 38.

Visual red, provisual red and, 561.

Vitamin deficiency, blood regeneration in, 54.

Vitamins and resistance to low barometric pressure, 130.

Wakim, K. G., R. D. Fink and K. K. Chen. The influence of adrenalin on plasma prothrombin, 452.

Walker, S. M., E. A. Smolik and A. S. Gilson, Jr. The effects of intracisternal injection of potassium phosphate on the rate and rhythm of the heart and on the blood pressure and on the respiration of the dog, 223.

Walkling, A. A. See Munro, Hart, Munro and Walkling, 206.

Warren, C. O. The effect of thiouracil on the respiration of bone marrow and leucocytes in vitro, 71.

Warren, J. V., E. A. Stead, Jr. and E. S. Brannon. The cardiac output in man: A study of some of the errors in the method of right heart catheterization, 458.

Water losses through the skin, 436.

Wedd, A. M. and H. A. Blair. The action of acetylcholine and epinephrine on the turtle ventricle, 147.

——. See Blair and Wedd, 528.

Wehrmacher, W. H. See Hines, Wehrmacher and Thomson, 48.

Weiss, P. and M. V. Edds, Jr. Spontaneous recovery of muscle following partial denervation, 587.

Whatmore, G. B., E. A. Morgan and N. Kleitman. The influence of avoidance conditioning on the course of non-avoidance conditioning in dogs, 432.

Wolff, H. G. See Torda and Wolff, 419, 608.

Wood, H. G. See Lorber, Lifson, Wood and Barcroft, 557.

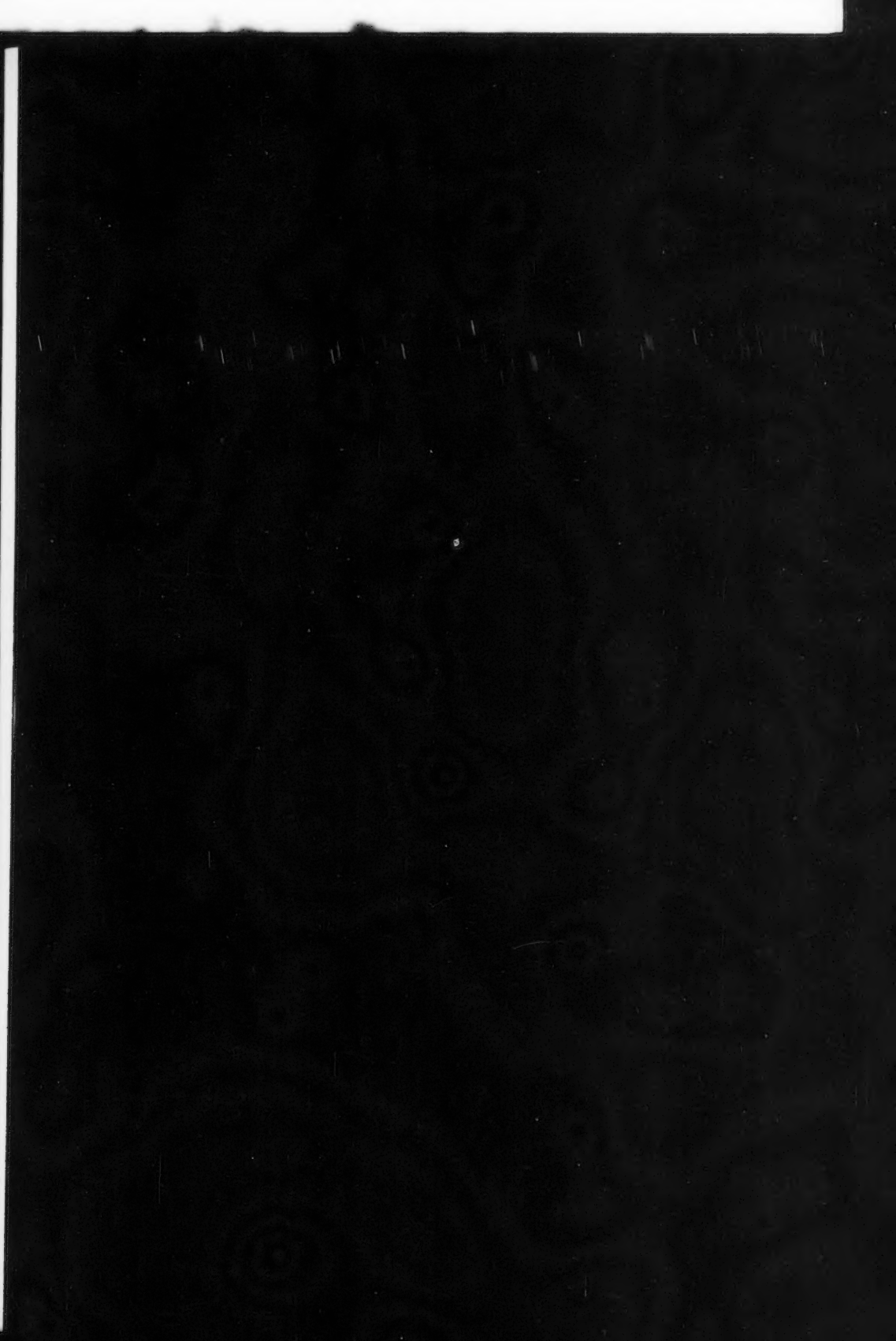
Work performance, effect of meals on blood sugar and, 402.

Wright, L. D., K. H. Beyer, H. R. Skeggs, H. F. Russo and E. A. Patch. The renal clearance of pantothenic acid, 633.

Wynn, W. See Haldi and Wynn, 402.

Yeast, effect of feeding, with alpha-estradiol, 465.

——, effects of, on cardiac failure in hyperthyroidism, 16.

Zeckwer, I. T. Compensatory growth of the kidney after unilateral nephrectomy in thyroidectomized rats, 681.

Zinc and equine gonadotropin, activity of, 28.